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United States Patent [19]

Wells et al.

[11] **Patent Number:** 5,895,346[45] **Date of Patent:** Apr. 20, 1999[54] **AUTOMATIC MULTIPLE-DECANTING CENTRIFUGE**

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[21] **Appl. No.:** 08/944,179[22] **Filed:** Oct. 6, 1997**Related U.S. Application Data**

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[51] **Int. Cl.⁶** B04B 5/02[52] **U.S. Cl.** 494/37

[58] **Field of Search** 494/13, 14, 16, 494/17, 20, 32, 33, 35, 37, 85; 210/781, 782

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Primary Examiner—Charles E. Cooley*Attorney, Agent, or Firm*—Dickinson Wright PLLC[57] **ABSTRACT**

A centrifuge is capable of holding a sample container in selected orientations, either during or after centrifugation, to drain supernatants between two or more chambers of the container. The draining may be gravity or centrifugal draining. This allows an automated process to subject a sample to a first physical or chemical treatment to produce a first supernatant, the first supernatant to be subjected to a second physical or chemical treatment, and a second supernatant to be separated from a desired component.

31 Claims, 3 Drawing Sheets